

MONOLITHIC SHOE LIFT DEVICE

BACKGROUND OF THE INVENTION

TECHNICAL FIELD:

This invention relates to shoe elevation devices that are worn within the shoe
5 to enhance the height of the wearer. Such devices are commonly referred to as lifts.

DESCRIPTION OF PRIOR ART

Prior art devices of this type have relied on a number of configurations and
designs; see for example U.S. Patents 5,138,774, 3,797,136, 5,655,315, 5,732,481 and
6,205,685.

10 In Patent 5,138,774, an insole with a removable height adjustable support
pads are illustrated having a removable shoe insole liner into which is inserted
multiple height enhancing inserts.

Patent 3,797,136 discloses a shoe with flexible height adjustment sole and a
number of interchangeable heels which interlock through the heel attachment insert.

15 Patent 5,655,315 on a shoe with an inflatable height adjustment cushion
provides for a bellows like heel insert that can be increased in size by the application
of fluid under pressure.

Patent 5,732,481 claims an adjustable height insole system having a full insole insert with interchangeable heel wedge inserts of varying height that can be selectively inserted and removed to adjust the effective heel height.

Finally, in Patent 6,205,685 discloses an adjustable orthotic that combines an elongated sole insert with an attachable segmented pad element for a variety of insert configurations.

SUMMARY OF THE INVENTION

The present invention provides for an insole insert of sculptured monolithic synthetic resin foam block to elevate the user when in use. The insole insert is of a cross linked polyethylene foam that provides for unique density performance under applied load of the user. Each insert has oppositely disposed contoured side surfaces with a tapered top surface extending from a flat heel engagement surface.

DESCRIPTION OF THE DRAWINGS

Figure 1 is a side elevational view of a shoe with a portion cut away to reveal a shoe insert of the invention;

Figure 2 is a large side elevational view of the shoe insert of the invention;

Figure 3 is a top plan view of the shoe insert shown in figure 2;

Figure 4 is an end elevational view on lines 4-4 of figure 2;

Figure 5 is an end elevational view on lines 5-5 of figure 2; and

Figure 6 is a side elevational view of the shoe insert of the invention with a user's foot positioned thereon.

DESCRIPTION OF THE PREFERRED EMBODIMENT

5 Referring to figures 1 and 2 of the drawings, a shoe insert 10 of the invention can be seen having a main body member 11 with a flat bottom surface portion 12 with an angular end heel bottom portion 13. An upper tapered foot engagement surface 14 extends the length of the main body member 11 as seen in figure 2 of the drawings. The main body member 11 has oppositely disposed sides 16 and 17, each
10 of which are contoured laterally with tapered front portion 18 extending outwardly from the body member 11 to a transition point at 19 defining a maximum transverse dimension of the body member 11 as best seen in figure 3 of the drawings. The sides 16 and 17 are tapered back therefrom converging at respective side heel surfaces 20 defining in a half arcuate heel portion 21 therebetween.

15 It will be evident from the above description that the shoe insert 10 of the invention so shaped will correspondingly conform to the inside of the shoe enclosure 22 illustrated in figure 1 of the drawings. It will also be noted that there is a distinctive and critical proportional relationship to the surface area of a front heel

portion at 23 and that of the tapered upper surface 14 thereto being proportionally larger. Additionally, it will be seen that the area of greatest transverse dimension which is midway along the longitudinal dimension of the tapered areas 18 as illustrated by the broken line 25 in figure 3 of the drawings. The angular end heel bottom portion 13 is in spaced parallel relation to that of the tapered foot engagement surface 14 as best seen in figure 2 of the drawings.

Referring now to figure 6 of the drawings, the shoe insert 10 of the invention can be seen with a graphic representation of the user's foot 27 (shown in broken lines) engaged thereon. Dotted lines at 28 along the heel's upper surface 13 define a slight compression of the insert under the weight of the foot 27. It is the insert's 10 unique compression material of a cross linked polyethylene synthetic resin configuration that makes this possible. This material allows for the dense yet yielding surface under continuous force typical in the heel engagement area determined by the confines of the wearer's shoe and increased pressure by the wearer by the heel to the elevation nature of the sole insert of the invention.

It will be evident from the above description that other synthetic resin based materials can also be used that have equivalent properties.

It will also be noted that the insert of the invention 10 maybe under some conditions be inverted and still effectively use, however, the primary form of the invention, as illustrated, is the preferred form and use of the invention.

It will thus be seen that a new and novel monolithic shoe insert has been
5 illustrated and described and that as such it provides a unique one-piece yieldable yet supportive structure for insert into a shoe to provide an effective visual enhancement of the relative height of the user.

It will be apparent to those skilled in the art that various changes and modifications may be made thereto without departing from the spirit of the
10 invention.

Therefore I claim: